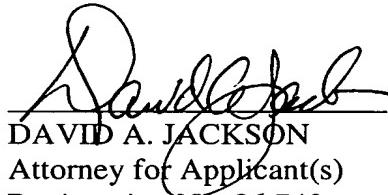


PATENT
2625-1-001

In all of the respects, the Application as filed is believed to be in proper form, and prompt and favorable processing before the U.S. Patent and Trademark Office is accordingly courteously solicited.

Entry of the foregoing amendments and early and favorable processing in the National Phase before the United States Patent and Trademark Office is courteously solicited.

Respectfully submitted,



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REPLACEMENT CLAIMS

WE CLAIM:

1. A method for producing a coating or diffusion layer on a substrate for use in contact with a food product or beverage, said coating or diffusion layer preventing or inhibiting passage therethrough of flavour-active or taint compounds, and said method comprising applying to the surface of said substrate an effective amount of a reactive polymer, said reactive polymer being a polymeric material comprising first functional groups which react with at least one flavour-active or odour-active taint compound and second functional groups (which may be the same as or different from said first functional groups) which react with said substrate.
2. A method according to claim 1, wherein said substrate is selected from the group consisting of a bottle closure, packaging or wrapping material, a bottle and other containers.
3. A method according to claim 1, wherein said substrate is a natural or synthetic cork, and said coating or diffusion layer prevents or inhibits passage of flavour-active or odour-active compounds from said cork to an alcoholic beverage in contact with said cork.
4. A method according to claim 1, wherein said flavour-active compounds are trichloroanisoles (TCA).
5. A method according to claim 1, wherein said reactive polymer comprises functional groups which can interact with flavour-active or odour-active compounds by a means selected from the group consisting of covalent bonding, hydrogen bonding, dipole-dipole interaction, polar interaction, ionic bonding, electrostatic forces and acid-base interaction.
6. A method according to claim 1, wherein said reactive polymer comprises functional groups which can interact with the substrate by a means selected from the

group consisting of covalent bonding, hydrogen bonding, dipole-dipole interaction, polar interaction, ionic bonding, electrostatic forces and acid-base interaction.

7. A method according to claim 1, wherein said reactive polymer comprises functional groups which can interact with flavour-active or odour-active compounds and with the substrate by a means selected from the group consisting of covalent bonding, hydrogen bonding, dipole-dipole interaction, polar interaction, ionic bonding, electrostatic forces and acid-base interaction.
8. A method according to claim 1, wherein the reaction between the reactive polymer and the flavour-active or odour-active compounds or between the reactive polymer and the substrate entails covalent bonding or polar interaction.
9. A method according to claim 6, wherein said functional groups comprise hydroxyl groups.
10. A method according to claim 1, wherein said functional groups are selected from the group consisting of polyethyleneglycol (PEG), amino, epoxy and methacryl groups.
11. A method according to claim 1, wherein the reaction between the reactive polymer and the flavour-active or odour-active compounds or between the reactive polymer and the substrate entails hydrogen bonding.
12. A method according to claim 1, wherein the reaction between the reactive polymer and the flavour-active or odour-active compounds or between the reactive polymer and the substrate entails an acid - base interaction.
13. A method according to claim 1, wherein said reactive polymer is selected from the group consisting of polyurethanes and copolymer ionomers thereof, terephthalate copolymers, polyethylene vinyl alcohols, (vinylidene) copolymers, epoxy polymers and copolymers, polyamides and amide copolymers, styrene

acrylonitrile (SAN)/ acrylonitile-butadiene-styrene (ABS) copolymers, poly (methacrylic acid) and copolymers thereof, poly (methyl) methacrylate and copolymers thereof, Bisphenol copolymers, Bisphenol A (BPA) - epichlorohydrin polymers, polyacetal, polyvinylacetate (PVA) copolymers, mono -, di - or poly - functionalised silanes and copolymers thereof, mono -, di - or poly - functionalised siloxanes and copolymers thereof, and functionalised or unfunctionalised polysilsesquioxanes.

14. A method according to claim 11, wherein said reactive polymer is selected from the group consisting of polyethylene vinyl alcohol, polyurethanes and copolymers or ionomers thereof, and poly (methacrylic acid) and copolymers thereof.
15. A method according to claim 11, wherein said reactive polymer is selected from the group consisting of mono -, di - or poly - functionalised silanes, silane copolymers, siloxanes and siloxane copolymers comprising functionalities selected from the group consisting of polyethylene glycol (PEG), isoprene, butadiene, lactone, amino, terephthalate, amino acid, heterocyclic, hydride (SiH), thiol and epoxy functionalities.
16. A coated substrate produced according to the method of claim 1.
17. A coated cork produced according to the method of claim 1.